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09/945,096	08/31/2001	Melissa E. DeRosier	sier 4846-001 31					
24112 COATS & BEN	7590 . 01/18/2007 NNETT. PLLC		EXAM	INER				
POBOX 5		•	JARRETT,	T, SCOTT L				
RALEIGH, NC	27602		ART UNIT	PAPER NUMBER				
		*	3623					
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE				
3 MO	NTHS .	01/18/2007	PAPER					

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application	on No	Applicant/o)	
				Applicant(s)	
	Office Action Summers	09/945,09	96 	DEROSIER ET A	<b>\L.</b> 
	Office Action Summary	Examine		Art Unit	
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Status					
1)[\]	Responsive to communication(s) filed o	n 16 November 2	006		
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3)	Since this application is in condition for			ers, prosecution as to th	ne merits is
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	· · · · · · · · · · · · · · · · · · ·	withdrawn from co	nsideration.		
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10)	The drawing(s) filed on is/are: a)	accepted or b)	objected to	by the Examiner.	
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11)[	The oath or declaration is objected to by	the Examiner. No	ote the attached	d Office Action or form P	PTO-152.
Priority ι	inder 35 U.S.C. § 119			,	
	Acknowledgment is made of a claim for All b) Some * c) None of:  1. Certified copies of the priority doc  2. Certified copies of the priority doc	cuments have bee	en received.		
	3. Copies of the certified copies of t	he priority docum	ents have been	• •	l Stage
	application from the International	· •			
- 8	See the attached detailed Office action for	or a list of the cert	itied copies not	received.	
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	e of References Cited (PTO-892)			Summary (PTO-413)	
	e of Draftsperson's Patent Drawing Review (PTO- mation Disclosure Statement(s) (PTO/SB/08)	-948)		s)/Mail Date nformal Patent Application	
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#### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.1 14, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.1 14. Applicant's submission filed on October 18, 2006 has been entered.

Currently claims 1-5, 7-17 and 19-38 are pending.

### Response to Amendments

2. The Objection to the Title is withdrawn in response to Applicant's Amendment to the Title.

The Objection to Claim 11 is withdrawn in response to Applicant's Amendment to Claim 11.

# Response to Arguments

3. Applicant's arguments filed October 18, 2006 and November 16, 2006 have been fully considered but they are not persuasive. Specifically Applicant's argues that the evidence shows diligence in reduction to practice of the invention, in the form of executable code, three days following that Sherman reference therefore making the Sherman reference unavailable as prior art.

The examiner respectfully disagrees, neither submitted the affidavits, the partial listings of the 3C-SCAN source code nor the CD-ROM containing a more recent version of the 3C-SCAN software are sufficient to establish that the inventor(s) performed all of the claimed method steps prior to the Sherman, Lawrence, Sociometry In The Classroom: How To Do It (October 19, 2000) reference.

Specifically the affidavits rely on the applicant's personal recollection of the timeline for the conception and reduction of practice of the instant application and several screen shots of what purportedly are software code files; however an image of a list of *files* does not demonstrate or enable one to understand or determine what, if any, of the claimed features of the sociometric system and method are embodied in the files or even if the list of files actually represent executable code related to the claimed invention. Therefore the newly submitted evidence submitted, including the affidavits by Dr. Derosier and Mr. Jim Thomas under 37 CFR 1.131, filed October 18, 2006 have been considered but are ineffective to overcome the Sherman reference.

It is noted that the applicant did not challenge the officially noticed facts cited in the pervious Office Action(s) therefore those statements as presented are herein after prior art. Specifically it has been established that it was old and well known in the art at the time of the invention:

 to perform error checking by re-executing (re-sampling, re-taking, representing) similar or identical questions during a survey; Application/Control Number: 09/945,096

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- to classify/categorize respondents into a plurality of categories such as

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more sociometric parameters, specifically using social preference and social impact, as

popular, rejected, neglected, controversial, average and unclassified utilizing one or

well as to classify respondents "falling" into the middle range of values on a

continuous/linear spectrum from popular → neglected as average (typical, common,

normal, etc.);

- to indicate the probability score (concordance, correspondence, accuracy,

strength/weakness, etc.) of a calculated/determined measure (metric, value, parameter,

score, etc.) to a classification/category wherein such scores provide an indication of the

how "close" (well) the score is to the "ideal" (typically, expected) value(s) for that

category; and

- to represent a continuous value (measure, score, etc.) utilizing a

continuum/scale/range via a linear bar/graph (slider bar) provides a convenient

mechanism for indicating where on the continuum a value lies.

#### Declarations under 37 CFR 1.131

4. The affidavits by Dr. Derosier and Mr. Thomas filed on April 7, 2006 and October 18, 2006 under 37 CFR 1.131 have been considered but are ineffective to overcome the Sherman, Lawrence, Sociometry In The Classroom: How To Do It (October 19, 2000) reference.

The affidavits filed April 7, 2006 and October 18, 2006 reconstruct a timeline for the instant application discloses that the invention was conceived at least as early as November 1999 (date of conception), successively released in pre-release system versions (alpha, beta) between January 2000-August 2000 and created on October 22, 2000 as 3C-SCAN Version 1.0 (reduction to practice; Last Paragraph, Page 2; First Paragraph, Page 3). The affidavits additionally provides several screen shots of file folders containing the filenames of what is alleged to be as Java code for the 3C-SCAN system/method (Exhibit 1, Figures 1-3).

In order to effectively swear behind the Sherman, Lawrence, Sociometry In The Classroom: How To Do It (October 19, 2000) reference the Affidavits filed on April 7, 2006 and October 18, 2006 under 37 CFR 1.131 must either: 1) establish conception of the invention coupled with due diligence just before October 19, 2000 to reduction to practice (actual or constructive), or 2) show actual reduction to practice before October 19, 2000. See MPEP 715.

With respect to establishing conception of the invention, the Affidavit filed on April 7, 2006 under 37 CFR 1.131 is insufficient to establish conception of the invention with respect to claims 1-5, 7-17 and 19-38. In order to establish conception of the invention, the Affidavit must show that the inventor(s) had conceived of *each and every limitation* of the claims. As per MPEP 2138.04, conception is established "when the invention is made sufficiently clear to enable one skilled in the art to reduce it to practice without the exercise of extensive experimentation." The Affidavits of Dr. Derosier nor Mr. Thomas do not persuasively show that the inventor(s) had conceived of *each and every limitation* of claims 1-5, 7-17 and 19-38 prior to October 19, 2000 as it is unclear when and if each and every one of the claimed features where present in the 3C-SCAN system/method as the affidavit merely contains screen shots of file folders containing filenames of a plurality of files purportedly used in the design, development and/or implementation of the claimed invention (Exhibit 1).

Examiner suggests applicant(s) map each and every one of the claimed features to the disclosed timeline thereby making it clear as to when each of the features was conceived as well as reduced to practice. Further examiner suggests applicant(s) provide additional evidence regarding the specific features implemented in the 3C-SCAN system/method (e.g. help files, user guide, manuals, training, etc.) to support the applicant(s) claims that the 3C-SCAN system/method provided each and every one of the claimed features.

With respect to due diligence, diligence comes into question only after prior conception is established which in the present case has not been sufficiently established. See MPEP 715.07(a). Under 37 CFR 1.131, the critical period in which diligence must be shown begins just prior to the effective date of the reference and ends with the date of a reduction to practice, either actual or constructive (i.e., filing a United States patent application). In the present case the evidence submitted is insufficient to establish diligence from a date prior to October 19, 2000 through October 22, 2000. According to MPEP 2138.06, merely stating that there were no weeks or months that the invention was not worked on is not enough. MPEP 2138.06 also states that even a 2-day period lacking activity has been held to be fatal. The period during which diligence is required must be accounted for by either affirmative acts or acceptable excuses. Thus, Applicant has not accounted for the entire period from just prior to the effective date of the reference and ends with the date of a reduction to practice. Rather, the timeline during the critical period only shows sporadic activity.

With respect to reduction to practice, reduction to practice may be an actual reduction to practice or a constructive reduction to practice (i.e., the filing of a patent application). In the present case, Applicant is attempting to establish actual reduction to practice to before the Sherman (October 19, 2000) reference. Establishing actual reduction to practice for a process requires *all of the steps* of the claimed process to have been successfully performed. See MPEP 2138.05. The evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a

NAFTA or WTO member country prior to the Sherman reference. The Affidavits have not persuasively shown the inventor(s) successfully performed all of the steps of at least the independent claims prior to October 19, 2000.

In particular, taking claim 1 for example, the evidence fails to show the successful performance of the any of the steps of the process prior to October 19, 2000. Neither the Affidavit nor the Exhibit show 1) creating a sociometric questionnaire comprising a plurality of sociometric questions related to social status and/or social relationships, 2) accepting responses to the sociometric questionnaire, and 3) a analyzing and outputting the sociometric analysis of the responses. While the affidavit discusses the instant application's timeline and Exhibit 1 provides several screen shots containing the names of a plurality of files, alleged Java program/code, purportedly used in the design, development and/or implementation of the claimed invention, none of the steps in question appear to have been actually performed before October 19, 2000. At best, the Affidavits show evidence of files, which may or may not contain Java code development before October 19, 2000.

Therefore, the Affidavits have not persuasively shown the inventor(s) successfully performed all of the steps of at least the independent claims prior to October 19, 2000 and thus, Applicant has not effectively sworn behind the Sherman reference by the second means.

In conclusion, the evidence submitted is insufficient to establish a reduction to practice of the invention in this country or a NAFTA or WTO member country prior to the

effective date of the Sherman, Lawrence, Sociometry In The Classroom: How To Do It (October 19, 2000) reference.

The evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the Sherman, Lawrence, Sociometry In The Classroom: How To Do It (October 19, 2000) reference to either a constructive reduction to practice or an actual reduction to practice.

The evidence submitted is insufficient to establish conception of the invention with respect to claims 1-5, 7-17 and 19-38.

Therefore, the Affidavits filed on April 7, 2006 and October 18, 2006 under 37 CFR 1.131 have been considered but are ineffective to overcome the Sherman, Lawrence, Sociometry In The Classroom: How To Do It (October 19, 2000) reference.

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1, 7-17 and 19-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over SociometryPlus by Online, Ltd. aspects of which are disclosed in at least the following:
  - I. SociometryPlus 2.0b Help Files & Screen Shots (April 2000), hereinafter reference A; and
- II. Sociometry.com Web Pages (April 2000), herein after reference B in view of Sherman, Lawrence, Sociometry In The Classroom: How To Do It (October 19, 2000).

Regarding Claims 1, 26 and 32 SociometryPlus teaches a system (a single software application) and method for performing sociometric analysis of a group of individuals comprising (reference A: Figures 1-18, Pages 21-29):

- creating a sociometric questionnaire comprising a plurality of sociometric questions relating to social status or relationships, each question including a plurality of potential nominations corresponding to the individuals in the group and each question soliciting at least one nomination from the group (reference A: Pages 1, 4-5; Figures 2-7);

- accepting responses to the questionnaire (reference A: Pages 1, 4-5; Figures 17-18); and

- analyzing and outputting the questionnaire responses to generate a sociometric analysis/report of social status and/or social relationships (e.g. Social status index (S) and rank (R) in a group, Positive expansion, Interaction concentration indexes, Positive (+) and negative (-) interrelations indexes, Group sociometric indexes, etc.; reference A: Pages 6-20; Figures 8-12).

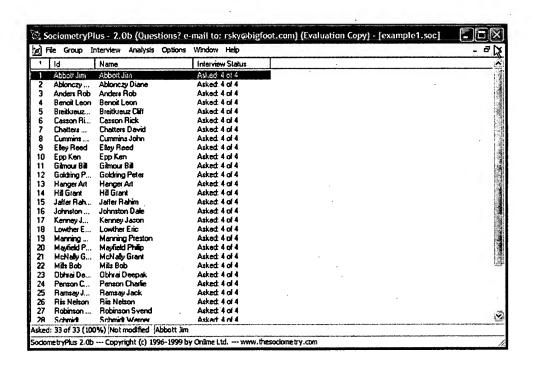


Figure 1: SociometryPlus - Main Screen

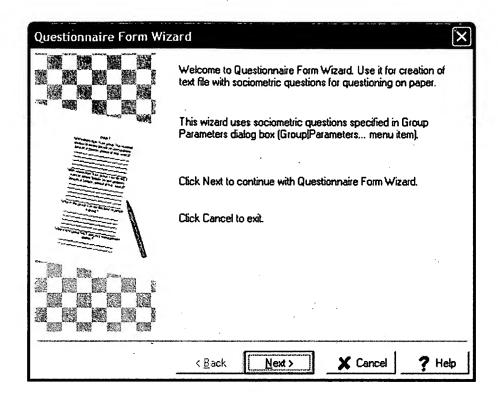


Figure 2: SociometryPlus - Questionnaire Wizard Step 1

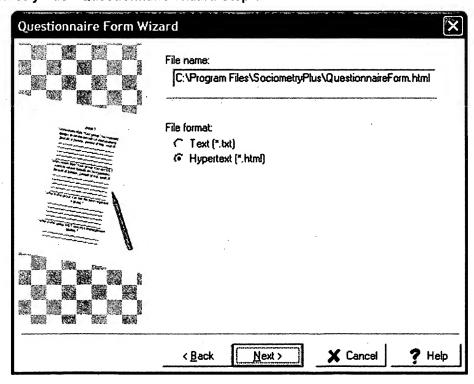


Figure 3: SociometryPlus - Questionnaire Wizard Step 2

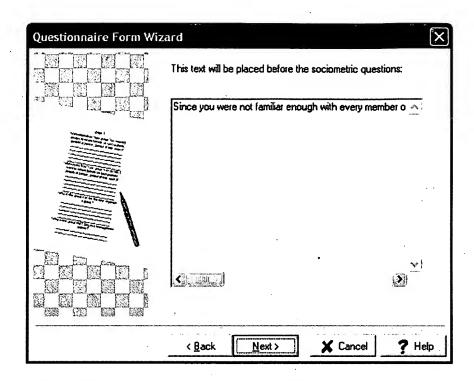


Figure 4: SociometryPlus - Questionnaire Wizard - Enter Sociometric Question(s)

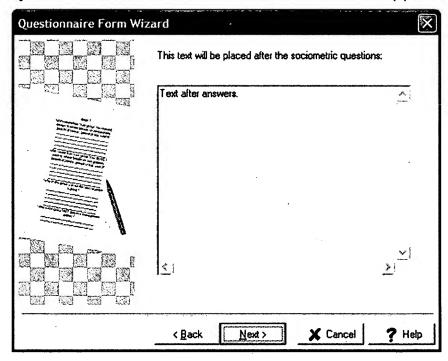


Figure 5: SociometryPlus - Questionnaire Wizard

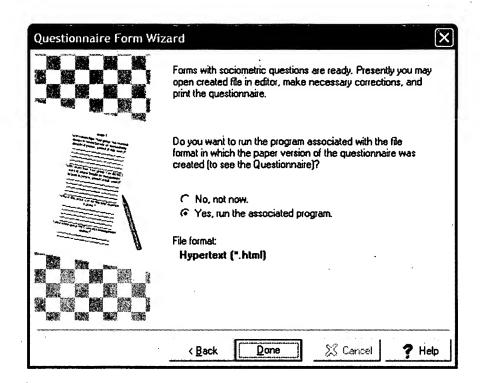


Figure 6: SociometryPlus - Questionnaire Wizard Final Step

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Figure 7: SociometryPlus - Questionnaire Wizard - Generated Questionnaire

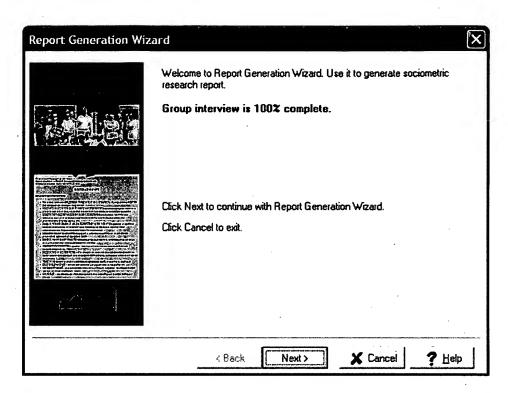


Figure 8: SociometryPlus - Report Generation Wizard Step 1

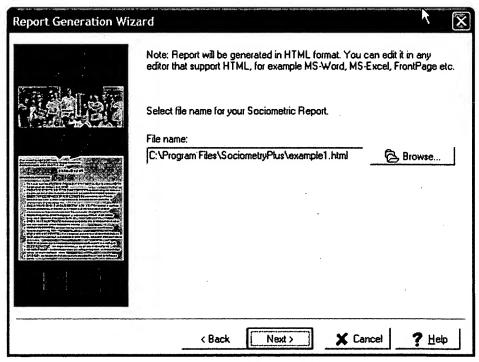


Figure 9: SociometryPlus - Report Generation Wizard Step 2

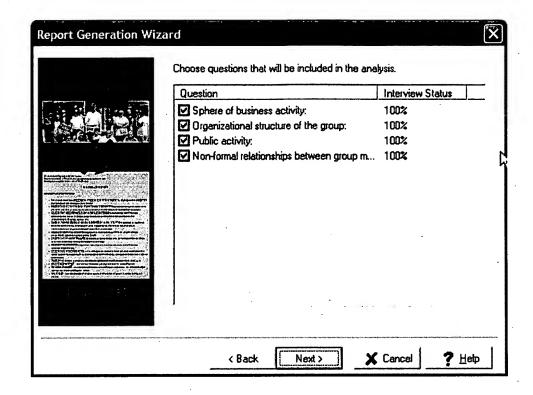


Figure 10: SociometryPlus - Report Generation Wizard Step 3

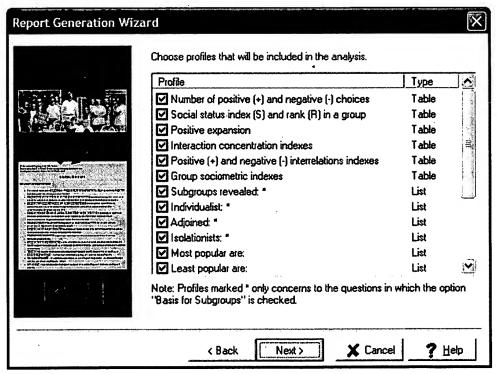


Figure 11: SociometryPlus - Report Generation Wizard Step 4

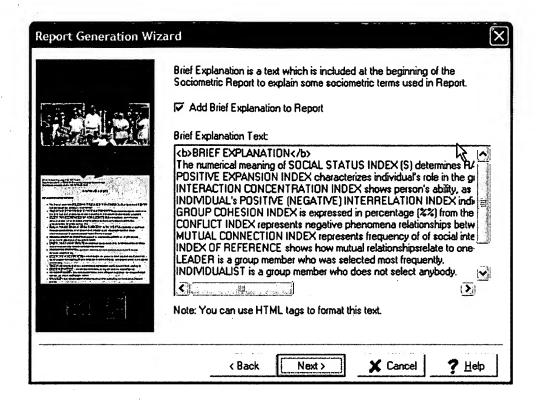


Figure 12: SociometryPlus - Report Generation Wizard Step 5

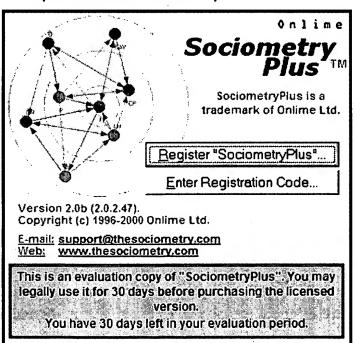


Figure 13: SociometryPlus About

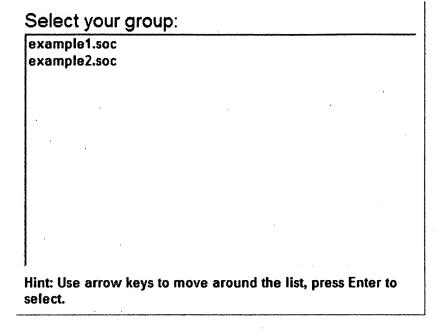


Figure 14: SociometryPlus - Group Interview - Select Group

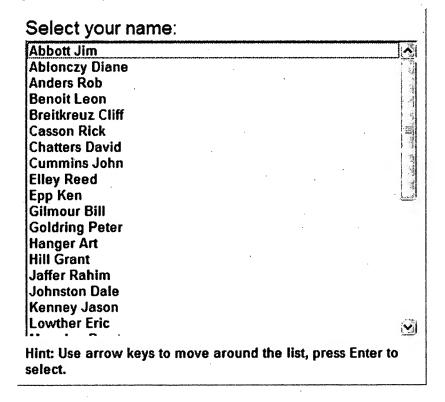


Figure 15: SociometryPlus - Group Interview - Select Interviewee

Instructions						
You will be asked some questions.  Please answer quickly without spending too much time on any given question. Choose what						
first comes to your mind.  Answering a question select a person's name from the list (or several names). Put a check mark next to the name. Depending on the group size you may choose up to 5 names.						
* To move the cursor use arrow keys.  * To select press [Spacebar] or click with the right button in the box next to the name. To deselect click on the name again.						
* After you answered the question - press [Enter] or "Next >"  * If you made a mistake, you can return to the previous question by clicking "< Back" button.  Good luck!						
Press Enter to continue						

Figure 16: SociometryPlus - Group Interview - Instructions

Abbott Jim	☐ Abbott Jim	☐ Mayfield Philip					
Please answer this question:	Ablonczy Diane	☐ McNally Grant					
<u></u>	☐ Anders Rob	☐ Mills Bob					
1. Who from Your group would You like	☑ Benoit Leon	☐ Obhrai Deepak					
to be around in business settings	☐ Breitkreuz Cliff	Penson Charlie					
(work, internship, practicum)?	☐ Casson Rick	□ Ramsay Jack					
***************************************	☐ Chatters David	☐ Riis Nelson					
	☐ Cummins John	□ Robinson Svend					
	☐ Elley Reed	☐ Schmidt Werner					
***************************************	☑ Epp Ken	☐ Solberg Monte					
	Gilmour Bill	Strahl Chuck					
	☐ Goldring Peter	☐ Thompson Myron					
	☐ Hanger Art	☐ White Randy					
Your choice:	☑ Hill Grant	□ Williams John 😽					
Benoit Leon	☐ Jaffer Rahim						
Hill Grant	☐ Johnston Dale						
Abionczy Diane	☐ Kenney Jason						
Penson Charlie	☐ Lowther Eric	·					
Epp Ken	☐ Manning Preston						
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Use arrow keys to move around the list, press [Spacebar] to select name, press [Enter] for next question.							
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Figure 17: SociometryPlus - Group Interview - example "like" question

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Abbott Jim	☐ Abbott Jim	☐ Mayfield Philip
Please answer this question:	☐ Ablonczy Diane	☐ McNally Grant
	☐ Anders Rob	☐ Mills Bob
1-2. Whom from Your group would You	☐ Benoit Leon	Obhrai Deepak
not like to be around in business	☐ Breitkreuz Cliff	Penson Chartie
settings (work, intership, practicum)?	☐ Casson Rick	☑ Ramsay Jack
	☐ Chatters David	☐ Riis Nelson
	Cummins John	☐ Robinson Svend
	Elley Reed	☐ Schmidt Werner
	Epp Ken	Solberg Monte
	Gilmour Bill	Strahl Chuck
	Goldring Peter	☐ Thompson Myron
	☐ Hanger Art	☐ White Randy
Your choice:	☑ Hill Grant	✓ Williams John
Solberg Monte	☑ Jaffer Rahim	
Hill Grant	☐ Johnston Dale	
Williams John	☐ Kenney Jason ☐ Lowther Eric	-
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Jaffer Rahim	Manning Preston	)
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Use arrow keys to move around the list, pr	ess [Spacebar] to select nam	e, press [Enter] for next question.
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Figure 18: SociometryPlus - Group Interview - example "not like" question

While SociometryPlus teaches that a plurality of practitioners perform goniometric analysis including teaches (Paragraph 3, Page 2) SociometryPlus does not expressly teach that the sociometric analysis of *schoolchildren* as claimed.

Sherman teaches performing the sociometric analysis of school children in an analogous art of sociometric analysis for the purposes of using well-known sociometric techniques and methods to understand schoolchildren status and/or relationships in order to identify potentially at risk children (Paragraphs 1-2, Page 3).

More generally Sherman teaches the traditional and well known methods for collecting and analyzing sociometric data including: peer nominations/ratings, sociometric ranking, social distance, recognition scale (Page 39), target technique

(Pages 12-13) and the like (Pages 1, 12, 17) as well as the generating of a plurality of sociometric measures, some of which are standardized, including but not limited to social distance (Pages 41-42), z-scores (e.g. social preference, social impact; Page 40), social status (Page 40), weighted popularity (Page 38); sociograms (Page 5, 12, 38; Figure 4), nominee/nominator matrix (Page 8), personal social distance rating (Page 41, Last Paragraph); bar graphs (Page 10, Figure 3), social ranking (Pages 42-43), and the like.

Sherman further teaches classifying individuals, based on one or more sociometrics, including but not limited to popular, liked more than disliked, disliked more than like, controversial, rejected and neglected (Pages 12-13, 41).

It would have been obvious to one skilled in the art at the time of the invention that the system and method performing sociometric analysis as taught by SociometryPlus would have been used to perform sociometric analysis on any of a plurality of individuals and/or groups including but not limited to schoolchildren in view of the teachings of Sherman; the resultant system/method enabling teachers/educators understand schoolchildren status and/or relationships in order to identify potentially at risk children (Sherman: Paragraphs 1-2, Page 3).

Regarding Claims 7, 27 and 33 SociometryPlus teaches a system and method for collecting and analyzing sociometric data wherein accepting user responses to the sociometric questionnaire further comprises:

- displaying on a computer screen a replica of the sociometric questionnaire, including the plurality of potential nominations associated with each question (reference A: Page 5; Figures 17-18 as shown above; reference B: Pages 1-3); and

- indicating selected nominations in response to one ore more displayed nominations (reference A: Figures 17-18 as shown above; reference B: Pages 1-3).

Regarding Claims 8-10 SociometryPlus does not expressly teach performing error checking by re-executing the question(s), comparing the nominations between the original and re-executed question(s), flagging deterred errors or correcting the detected errors as claimed.

Official notice is taken that error checking by re-executing (re-sampling, re-taking, re-presenting) similar or identical questions during a survey is an old and well known technique wherein users responses can be analyzed to determine such thing as response drift (responses change over time), response inconsistency or the like.

For example surveyors may wish to know (i.e. identify and flag) if an respondent is truly answering the posed questions or simply going through the motions (i.e. selection answers randomly or some pattern just to complete the survey) and potentially ignoring/discounting respondents who exhibit such patterns.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by

SociometryPlus would have benefited from performing error checking/correction on the sociometric survey in view of the teachings of official notice; the resultant system/method enabling users to identify and potential discount respondents who are not truly answering the questions (i.e. merely going through the motions).

Regarding Claim 11 SociometryPlus teaches a system and method for collecting and analyzing sociometric data wherein analyzing the responses further comprises summing the total nominations an individual received from other individuals for each question and standardizing the sum within the group (e.g. social status index, positive expansion measures are between 0 and 1; reference A: SociometryPlus Report, Pages 8-20).

SociometryPlus does not expressly teach performing sociometric analysis on schoolchildren as claimed.

Sherman teaches performing sociometric analysis on schoolchildren wherein the analysis comprises summing the total nominations that a schoolchild received from other schoolchildren and standardizing the sum in an analogous art of sociometric analysis for the purposes of understanding schoolchildren status and/or relationships in order to identify potentially at risk children (Paragraphs 1-2, Page 3).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for performing sociometric analysis would have benefited from performing sociometric analysis on schoolchildren wherein the analysis comprises summing the total nominations that a schoolchild received from other schoolchildren and standardizing the sum in view of the teachings of Sherman; the resultant system/method enabling teachers/educators understand schoolchildren status and/or relationships in order to identify potentially at risk children (Sherman: Paragraphs 1-2, Page 3).

Regarding Claim 12 SociometryPlus does not expressly teach performing sociometric analysis of schoolchildren or generating first/second-standardized factors (SF1, SF2) computing first/second scores (S1/S2) or standardizing the first/second (SS1, SS2) as claimed.

Sherman teaches performing sociometric analysis of schoolchildren, as discussed above, wherein the method further comprises generating first and standardized factors (z-scores, liked most, like least, zLM, zLL, social preference, social impact; Pages 40-41); computing a first score by SF1-SF2 (social preference, SP = zLM – zLL (i.e. SF1); computing a second score by SF1 + SF2 (social impact, SI = zLM + zLL; SF2); and standardizing the first and second scores (zLL, zLM, SS1/SS2; Pages 40-42; Figure 18) in an analogous art of sociometrics for the purposes of making it

possible to normatively compare scores between groups and/or over time (Paragraph 1, Page 41).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by SociometryPlus would have been used to analyze a plurality of groups/individuals including but not limited to schoolchildren as well as benefited from utilizing a plurality of traditional sociometric factors/scores/measures including but not limited to z-scores, social impact or social preference in view of the teachings of Sherman; the resultant system enabling teachers/educators understand schoolchildren status and/or relationships in order to identify potentially at risk children (Sherman: Paragraphs 1-2, Page 3) by normatively comparing scores between groups and or over time (Sherman: Paragraph 1, Page 41).

Regarding Claim 13 SociometryPlus teaches a system and method for collecting and analyzing sociometric data wherein respondents are classified into a plurality of sociometric classifications/categories including but not limited to individualist, leader, isolationist and the like. (reference A: Pages 14-20).

SociometryPlus does not expressly teach classifying respondents into the six sociometric classifications utilizing the equations/formulas or that the respondents are schoolchildren as claimed.

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Sherman teaches classifying sociometric survey/questionnaire respondents, schoolchildren, into at least the following classifications (groups, categories, etc.; Pages 12-13, 40-42; Figures 3 and 18):

- Popular SP> 1, zLM >0, and zLL<0;

Rejected SP<-1, zLM<0, and zLL>0;

Neglected SI <-1, zLM=0, and zLL= 0;</li>

- Controversial S I> 1, zLM>0, and zLL>0; and

- Average all others

in an analogous art of sociometric analysis/classification for the purposes of classifying/grouping and graphing (outputting) schoolchildren's classification (Paragraph 1, Page 12).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by SocimetryPlus would have benefited from classifying/grouping/identifying/assigning schoolchildren to a plurality of classes/categories based on a one or more sociometric measures including but not limited to social impact and/or social preference in view of the teachings of Sherman; the resultant enabling users to classify/group and output/display each individual's classification (Sherman: Paragraph 1, Page 12).

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Neither SociometryPlus nor Sherman teach all of the specific classifications as claimed:

Class 1 (popular) SS1>1, SF1 <0, and SF2>0;

Class 2 (rejected) SS1<-1, SF1>0, and SF2<0;

Class 3 (neglected) SS2<-1, SF1<0, and SF2<0;

Class 4 (controversial) SS2>1, SF1>0, and SF2>0;

Class 5 (average) -0.5<SS1<0.5, and -0.5<SS2 <0.5; and

Class 6 (unclassified) all others.

Official notice is taken that classifying/categorizing respondents into a plurality of categories such as popular, rejected, neglected, controversial, average and unclassified utilizing one or more sociometric parameters, specifically using social preference and social impact, is old and very well known. More specifically classifying respondents "falling" into the middle range of values on a continuous/linear spectrum from popular  $\rightarrow$  neglected as average (typical, common, normal, etc.) is old and well known.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by the combination of SociometryPlus and Sherman with its ability to classify/categorize respondents based on standardized scores/factors/measures into a plurality of categories on a continuum/spectrum from popular to rejected would have benefited from

classifying respondents "falling" into the middle range of values as average (typical, expected, normal, etc.) in view of the teachings of official notice.

Regarding Claim 14 SociometryPlus does not expressly teach indicating the schoolchildren least liked/most liked utilizing the generated SF1 as claimed

Sherman teaches indicating the least liked and most liked schoolchildren utilizing SF1 (Pages 40-42) in analogous art of sociometric analysis for the purpose of enabling teachers/educators to understand schoolchildren status and/or relationships in order to identify potentially at risk children (Sherman: Paragraphs 1-2, Page 3).

It would have been obvious to one skilled in the art that the system and method for collecting and analyzing sociometric data as taught by SociometryPlus would have benefited from indicating the most and least liked schoolchildren utilizing a standardized factor in view of the teachings of Sherman; the resultant system/method enabling teachers/educators understand schoolchildren status and/or relationships in order to identify potentially at risk children (Sherman: Paragraphs 1-2, Page 3).

Regarding Claims 15 and 17 SociometryPlus does not expressly teach calculating probability scores for each of the six sociometric social classifications indicating the reliability of an individual's classification within a group.

Official notice is taken that indicating the probability score (concordance, correspondence, accuracy, strength/weakness, etc.) of a calculated/determined measure (metric, value, parameter, score, etc.) to a classification/category is old and well known for providing an indication of the how "close" (well) the score is to the "ideal" (typically, expected) value(s) for that category.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by SociometryPlus would have benefited from indicating how closely the classified individual matched the "typical" individual classified in that category (reliability/probability score) in view of the teachings of official notice; the resultant system enabling users to judge (see, view, etc.) how close a match the individual is to the category/profile/classification they are categorized in.

Regarding Claim 16 SociometryPlus does not expressly teach calculating strength scores for each schoolchild indicative of the degree to which an individual's social classification is fixed versus fluid as claimed

Sherman teaches the stability (i.e. fluid or fixed) of sociometric measures/classifications in different settings or over time (Page 41) in an analogous art of sociometric analysis for the purposes of understanding how and if the schoolchild's

sociometric measure will change/evolve (e.g. "do kids change or maintain their social" status as they grow older", Paragraph 1, Page 41).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by SociometryPlus would have benefited from determining/calculating strength scores (i.e. stability) for each of the individual's classifications in view of the teachings of Sherman; the resultant system enabling users to ask/answer such questions as "do kids change or maintain their social status as they grow older" (Sherman: Paragraph 1, Page 41).

Regarding Claims 19, 30 and 36 SociometryPlus does not expressly teach detecting and indicating self-nominations as claimed.

Sherman teaches detecting and indicating self-nominations/scores (personal social distance; Pages 41-42) in an analogous art of sociometric analysis for the purposes of indicating such things as "that a child is "out-of-touch" with their "Social Reality" (Last Paragraph, Page 41).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by SociometryPlus would have benefited from enabling respondents to rate/nominate themselves in view of the teachings of Sherman; the resultant system indicating such

things as "that a child is "out-of-touch" with their "Social Reality" (Sherman: Last Paragraph, Page 41).

Regarding Claim 20 SociometryPlus does not expressly teach outputting a scatter plot diagram/chart having coordinate axes indicating sociometric values as claimed.

Sherman teaches outputting a scatter plot (chart, diagram, graph, scatter gram, etc.; a graphical representation consisting of ordered pairs possibly showing a relationship between two variable quantities) wherein the scatter plot has coordinate axes indicating sociometric values, in analogous art of sociometric analysis/classification for the purposes of classifying/categorizing respondents based on their sociometric measures (factors, scores, etc.; Pages 12-13; Figure 4).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by SociometryPlus would have benefited generating a graphical representation consisting of ordered pairs possibly showing a relationship between two sociometric scores/factors/measures (scatter plot having coordinate axes indicating sociometric values) in view of the teachings of Sherman; the resultant system enabling users to visualize the classification of schoolchildren based on their sociometric measures (factors, scores, etc.; Sherman: Pages 12-13; Figure 4).

Regarding Claims 21-22 SociometryPlus does not expressly teach representing/highlighting (indicating) selected schoolchildren and/or schoolchildren in subgroups on a scatter plot/diagram as claimed.

Sherman teaches generating a scatter plot (sociogram, chart, diagram, graph, scatter gram, etc.; a graphical representation consisting of ordered pairs possibly showing a relationship between two variable quantities), in analogous art of sociometric analysis/classification for the purposes of indicating the classification the schoolchildren/group/subgroups as well as indicating relationships between the schoolchildren/groups/subgroups based on their sociometric measures (factors, scores, etc.; Pages 12-13; Figure 4).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by SociometryPlus would have benefited generating a graphical representation consisting of ordered pairs possibly indicating/highlighting the classifications and interrelations between the plurality of respondents/groups/subgroups in view of the teachings of Sherman; the resultant system enabling users to visualize the classification as well as the interrelationships between the plurality of respondents/groups/subgroups based on their sociometric measures (factors, scores, etc.; Sherman: Pages 12-13; Figure 4).

Regarding Claim 23 Sociometry does not expressly teach utilizing spatial regions within the scatter plot diagram/chart to represent sociometric social classifications as claimed.

Sherman teaches utilizing spatial regions within a scatter plot (chart, diagram, graph, scattergram, etc.) in analogous art of sociometric analysis for the purposes of classifying/categorizing respondents based on their sociometric measures (factors, scores, social classifications, etc.; Pages 12-13; Figure 4).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by SociometryPlus would have benefited from utilizing spatial regions (rings) within/on a a graphical representation consisting of ordered pairs possibly showing a relationship between two sociometric scores/factors/measures (scatter plot) in view of the teachings of Sherman; the resultant system enabling users to visualize the social classification of respondents based on their sociometric measures (factors, scores, etc.; Sherman: Pages 12-13; Figure 4).

Regarding Claims 24-25 SociometryPlus does not expressly teach generating a slider bar for one or more sociometric questions wherein the slider bar indicates (represents, locates, etc.) an schoolchild's ranking (score, classification, etc.) with

respect to the question (i.e. represents their score on a continuum/scale for the question) as claimed.

Sherman teaches sociometric collecting and analyzing sociometric ratings utilizing a ratings scale (range, continuum, distance, etc.; Pages 41-42; Figure 18) wherein schoolchildren rate peers from 1-5, the collected ratings are then weighted and standardized so that the scores (ratings, distance) form a continuous range from 1-5 in an analogous art of sociometric analysis for the purposes of providing a score wherein every schoolchild contributes to each other schoolchild's score (Paragraph 2, Page 42).

It would have been obvious to one skilled in the art at the time of the invention that the method and system for collecting and analyzing sociometric data as taught by SociometryPlus would have benefited from utilizing a plurality of continuous/ranged sociometric measures including but not limited to social distances and/or sociometric rankings in view of the teachings of Sherman; the resultant system enabling users to evaluate schoolchildren sociometrics through a plurality of well known sociometric techniques and/or utilize a socimetric technique such that every schoolchild contributes to each other schoolchildren's score (Sherman: Paragraph 2, Page 42).

Official notice is taken that representing a continuous value (measure, score, etc.) utilizing a continuum/scale/range via a linear bar/graph (slider bar) is old and well known for providing a convenient mechanism for indicating where on the continuum a value lies.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by the combination of SociometryPlus and Sherman with its ability to determine a plurality of sociometric measures including but not limited to continuous measures/scores/ranks would have benefited from displaying/outputting the values of the continuous measures by indicating the measures value/location on a continuum/scale/range (slider bar) in view of the teachings of official notice; the resultant system providing a convenient mechanism for indicating where on the continuum the score lies.

Regarding Claims 28 and 34, Claims 28 and 34 recite similar limitations to Claims 15-17 and are therefore rejected using the same art and rationale as applied in the rejection of Claims 15-17.

Regarding Claims 29 and 35 SociometryPlus does not expressly teach detecting and indicating reciprocal nominations as claimed.

Sherman teaches detecting and representing mutual choices (i.e. reciprocal relationships/links; Pages 28, 31, 34; Figures 12, 14, 16-17) in an analogous art of sociometric analysis/classification for the purposes of identifying/detecting and

diagnosing peer relationships, friendships and/or social status of schoolchildren in order to identify potentially at risk schoolchildren (Paragraphs 1 and 4; Page 3).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by SociometryPlus would have benefited from detecting and indicating reciprocal nominations in view of the teachings of Sherman; the resultant system enabling users to diagnose the peer relationships amongst a plurality of schoolchildren (Sherman: Paragraphs 1 and 4; Page 3).

Regarding Claims 31 and 37, Claims 31 and 37 recite similar limitations to Claims 20 and 24-25 and are therefore rejected using the same art and rationale as applied in the rejection of Claims 20 and 24-25.

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1. Claims 2-5 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over SociometryPlus by Online, Ltd. aspects of which are disclosed in at least the following:

- I. SociometryPlus 2.0b Help Files & Screen Shots (April 2000), hereinafter reference A; and
- II. Sociometry.com Web Pages (April 2000), herein after reference B in view of Sherman, Lawrence, Sociometry In The Classroom: How To Do It (October 19, 2000) as applied to claims 1, 7-17 and 19-37 above and further in view of Van Duyne et al., U.S. Patent No. 6,859,784.

Regarding Claim 2 SociometryPlus teaches a system and method for collecting and analyzing sociometric data wherein creating a sociometric questionnaire further comprises:

- displaying a plurality of questions to be included in the questionnaire (reference A: Figures 2-7 as shown above; reference B: Pages 1, 11 and 15);
- accepting user selections of the questions (reference A: Figures 2-7 as shown above; reference B: Pages 1, 11 and 15); and
- generating a questionnaire containing the user questions (reference A: Figures 2-7 as shown above; reference B: Pages 1, 11 and 15).

Neither SociometryPlus nor Sherman expressly teach the user selecting one or more questions from a list of predetermined questions having a known relationship as claimed.

Van Duyne et al. teach user selecting one or more questions from a list of predetermined questions having a known relationship (e.g. research metric, question, etc.; Column 2, Lines 9-12) in an analogous art of surveys for the purposes of enabling users to customize survey/research questions as well as conduct research/surveys via a website (Column 1, Lines 50-68; Column 2, Lines 1-8 and 61-68; Column 11, Lines 34-54; Figure 1, Element 122; Figure 3).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for performing sociometric analysis of a group of schoolchildren as taught by the combination of SociometryPlus and Sherman would have benefited from enabling users to select one or more questions from a list of predetermined questions having a known relationship in view of the teachings of Van Duyne et al.; the resultant system/method enabling users to customize survey/research questions as well as conduct research/surveys via a website (Van Duyne et al.: Column 1, Lines 50-68; Column 2, Lines 1-8 and 61-68; Column 11, Lines 34-54; Figure 1, Element 122; Figure 3).

Regarding Claims 3 and 38 SociometryPlus teaches a system and method for collecting and analyzing sociometric data wherein the questions solicit nominations (reference A: Pages 1-5; Figures 1-18 as shown above; reference B: Pages 1-3).

SociometryPlus does not expressly teach that nominations are selected from the group consisting of liked most, liked least, is aggressive, is picked on, is teased, is weird, is a friend and is not a friend as claimed.

Sherman teaches collecting nominations for a plurality of customized sociometric questions including but not limited to most liked, least liked, best friends, and the like (Pages 5, 44), in an analogous art of sociometric analysis, for the purposes of diagnosing peer relationships amongst a plurality of schoolchildren and/or identifying at risk schoolchildren (Paragraphs 1 and 4; Page 3). Sherman further teaches classifying individuals, based on one or more sociometric factors/classifications, including but not limited to popular, liked more than disliked, disliked more than like, controversial, rejected and neglected (Pages 12-13, 41).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing sociometric data as taught by SociometryPlus would have benefited from classifying schoolchildren into a plurality of sociometric classifications in view of the teachings of Sherman; the resultant system

enabling users to diagnose the peer relationships amongst a plurality of schoolchildren and/or identify at risk schoolchildren (Sherman: Paragraphs 1 and 4; Page 3).

While both SociometryPlus and Sherman teach creating, conducting and analyzing customized sociometric questions in order to classify the plurality of respondents utilizing well known and traditional sociometry techniques neither SociometryPlus nor Sherman expressly teach classifying schoolchildren into is aggressive, is picked on, is teased, is weird, is a friend and is not a friend as categories/classifications as claimed however; these differences are only found in the non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific labels applied to the sociometric categories. Further, the structural elements remain the same regardless of the specific labels applied to the sociometric categories. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.

Regarding Claim 4 SociometryPlus teaches a system and method for collecting and analyzing sociometric data wherein participants can be divided in to groups/subgroups, accepting individual names by subgroup and assigning a unique

identifier to each individual (reference A: Pages 3, 7; Figures 1 and 14-15 as shown above).

Sherman does not expressly teach that the subgroups are schoolchildren or assigning a unique identifier to each schoolchild other than the schoolchild's name as claimed.

Sherman teaches performing sociometric analysis on a plurality of schoolchildren wherein the children are divided into subgroups (Step 4, Page 12; Page 41) as well as assigning a unique identifier to each schoolchild other than the schoolchild's name (picture, number, etc.; Last Paragraph, Page 39; Paragraph 1, Page 40) in an analogous art of sociometric analysis for the purposes of assisting schoolchildren in completing the sociometric surveys/interviews wherein some children are unable to read a list of names (Last Paragraph, Page 39).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for performing sociometric analysis as taught by SociometryPlus would have used to perform the sociometric analysis/classification of a plurality of respondents including but not limited to schoolchildren and benefited from assigning unique identifiers, other than the schoolchild's name, to schoolchildren in view of the teachings of Sherman; the resultant system/method enabling teachers/educators understand schoolchildren status and/or relationships in order to identify potentially at

risk children (Sherman: Paragraphs 1-2, Page 3) as well as assisting schoolchildren in completing the sociometric surveys/interviews wherein some children are unable to read a list of names (Sherman: Last Paragraph, Page 39).

Regarding Claim 5 SociometryPlus teaches a system and method for collecting and analyzing sociometric data wherein individuals are sorted by first name (reference A: Page 3; Figures 1 and 14-15).

SociometryPlus does not expressly teach performing the sociometric analysis of schoolchildren or subsequently sorting the schoolchildren by first name as claimed.

Sherman teaches sorting the schoolchildren by first name in an analogous art of sociometric analysis (Paragraph 1, Page 8; Figure 18).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for performing sociometric analysis as taught by SociometryPlus would have used to perform the sociometric analysis/classification of a plurality of respondents including but not limited to schoolchildren; the resultant system/method enabling teachers/educators understand schoolchildren status and/or relationships in order to identify potentially at risk children (Sherman: Paragraphs 1-2, Page 3).

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Robert et al., A Comparison of Methods for Defining Sociometric Status Among Children (1991), compares a plurality of well-known sociometric assessment and classification methods for schoolchildren including positive/negative nominations and peer rating.
- Newcomb et al., Children's Peer Relations (1993), teach several methods and techniques (models) for analyzing and understanding children's peer relationships including but not limited to several well known sociometric classification techniques such as Coie et al.'s sociometric classification model which derives standardized socimetric measures (social impact, social preference, z-scores) based on liked most and least liked peer nominations.
- Frederickson et al., Sociometric Classification Methods in School Peer Groups (1998), teach a plurality of well-known sociometric assessment and classification methods and techniques including peer nominations, roster and rating scales, forced choice group preference, Like to Play, How I Feel Towards Others, and the like.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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